

# **EXHIBIT 602.5**

**SANTA CRUZ COUNTY SHERIFF-CORONER'S OFFICE**

701 Ocean Street

Santa Cruz, California

\* REPORT OF AUTOPSY EXAMINATION \*

**AUTOPSY NUMBER:** CA08-037

**FILE NUMBER:** 08-02797

**NAME:** Daniel Mc Cornack

**AGE:** 45 **SEX:** Male

**PLACE OF DEATH:** Smithwood R.V. Park, 4770 Hwy 9, Felton

**DATE/HOUR OF DEATH:** March 23, 2008 @ 0052 Hours

**AUTOPSY PERFORMED:** Santa Cruz County Morgue

**DATE/HOUR OF AUTOPSY:** March 26, 2008 @ 7:30 a.m.

**PATHOLOGIST:** Richard T. Mason, M.D.

**BODY IDENTIFIED BY:** Ankle tag.

**ATTENDING PHYSICIAN:** None.

**CAUSE OF DEATH:**

CARDIAC ARREST

Due to: Ventricular arrhythmia

Due to: Digoxin toxicity

Due to: Digoxin poisoning.

**CONTRIBUTORY:**

Exogenous obesity.

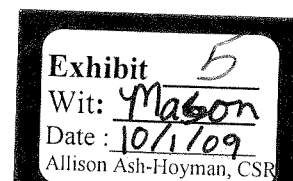
**MANNER:**

~~Natural~~ Accident *RM*

**DIAGNOSES:**

1. Digoxin poisoning with:
  - A. Toxic level of digoxin present in blood, 3.6nanog/mL.
  - B. Cardiac arrhythmia due to digoxin toxicity.

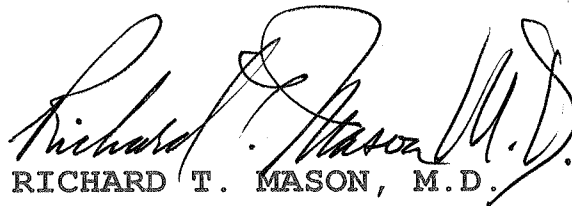
PLAINTIFFS' EXHIBITS 010282



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**DIAGNOSES, continued**

2. Hypertensive and arteriosclerotic cardiovascular disease with:
  - A. Cardiomegaly and left ventricular hypertrophy.
  - B. Coronary arteriosclerosis, mild to moderate.
  - C. Myocardial fibrosis, mild.
  - D. Atrial fibrillation by history.
  - E. Probable ventricular arrhythmia and arrest.
3. Cerebral edema and congestion.
4. Pulmonary edema and congestion.
5. Exogenous obesity, moderate.

  
RICHARD T. MASON, M.D.  
Forensic Pathologist

RTM/dp

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#### **EXTERNAL EXAMINATION**

The body examined is that of a well-developed, mildly obese, middle-aged white male that appears the stated age of 45 years. The body is 70 inches in length and weighs 220 pounds. The scalp hair is medium brown with gray and is cut short measuring 1/4 inch. The eyes are blue gray with the pupils equal in diameter, measuring 6 mm. There is an adhesive nostril dilating device attached over the midportion of the nostrils. There is a short 3/4 inch grayish brown mustache. Natural teeth in good condition are present in the mouth. There is a 1-2 mm growth of beard present on the lower face. There is prominent pinkish cyanosis of the anterior face and neck.

Examination of the anterior chest reveals 4 x 6 inch adhesive defibrillator electrodes present over the left lower lateral chest and the right upper anterior chest. Adhesive EKG electrodes are present over the right and left upper anterior chest and the right and left lower abdomen. The axillae are normal.

Examination of the anterior abdomen reveals it to be mildly obese. There is a slight umbilical hernia. There are no other marks or wounds are noted on the anterior abdomen. Normal male external genitalia are present. The penis is circumcised.

Examination of the lower limbs reveals normal, symmetric, muscular right and left thighs and right and left lower legs. There is a coroner's identification band present on the right ankle bearing the name: McCornack, Daniel; #08-2790. The right and left feet are normal.

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Examination of the upper limbs reveals normal, symmetric, muscular right and left upper arms and right and left forearms.

The antecubital spaces are clean with no marks or wounds. The right and left forearms are unremarkable. An intravenous line is in position through a needle puncture wound on the dorsum of the left hand. This line is attached to a 1-liter bag of normal saline.

Examination of the hands reveals them to be normal with short intact fingernails.

#### INTERNAL EXAMINATION

##### HEAD:

Reflection of the scalp reveals an absence of any contusions on the galeal surface. The calvarium is intact. Reflection of the calvarium reveals prominent cerebral edema. The gyri are flattened. The meninges are clear but congested. The brain weighs 1,640 grams. The brain has a normal external morphology except for the edema. The cerebral arteries are normal in distribution and appearance.

Multiple coronal sections through both cerebral hemispheres reveal normal cortex, normal white matter and normal basal ganglia. Sections through the brainstem and cerebellum reveal these structures to be normal.

The dura is stripped from the base of the skull to reveal an intact skull base.

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NECK:

The hyoid bone, larynx, trachea, soft tissues, cervical spine are intact. The airway is fully patent.

BODY CAVITIES:

The pericardial cavity contains 25 mL of clear yellow fluid. There is no excess fluid in the pleural or peritoneal cavities.

CARDIOVASCULAR SYSTEM:

Heart weight 500 grams. There is cardiomegaly and left ventricular hypertrophy. The epicardial surfaces are smooth and glistening. The heart valves are normal. The atria are normal in size. The endocardial surfaces of the atria and ventricles are normal in appearance. Dissection of the coronary arteries reveals abundant, scattered, flattened atherosclerotic plaque in the right coronary artery, which is of greatest circumference compared to the LAD and the circumflex coronary arteries. There is flattened atherosclerotic plaque in a small left anterior descending coronary artery. There is a minimal amount of atherosclerotic plaque in the left circumflex coronary artery. Multiple cross sections through both ventricles of the heart reveal some mild diffusely distributed myocardial fibrosis. There is cardiomegaly and left ventricular hypertrophy with the left ventricle measuring 16 mm in thickness and the right ventricle measuring 4 mm in thickness. There are no foci or evidence of old or recent myocardial infarction.

Examination of the aorta reveals it to be smooth with minimal focal atherosclerosis. The superior and inferior vena cavae are intact and normal with no thromboemboli.

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RESPIRATORY TRACT:

Lungs, weight right 830 grams, left 840 grams. There is severe bilateral pulmonary edema and congestion. Bloodstained watery fluid runs from the cut surfaces of all lobes of both lungs. There are no foci of consolidation. The major bronchi contain a small amount of bloodstained edema fluid. The pulmonary arteries are widely patent with no thromboemboli.

LIVER:

Weight 2,550 grams. The smooth, light, reddish tan capsular surface is intact. The liver is enlarged and there is fatty metamorphosis. The parenchyma is light pinkish tan and fractures easily on digital pressure. There is no increase in fibrous tissues to palpation. The intra and extrahepatic blood vessels and bile ducts are grossly normal. The gallbladder is thin-walled and contains 1 mL of light brown transparent bile.

SPLEEN:

Weight 470 grams. This organ is enlarged and congested. The dark gray brown capsular surface is intact with no evidence of trauma. The parenchyma is dark red brown firm.

PANCREAS:

Weight 210 grams. Normal, pale tan, lobular, autolyzed parenchyma is noted on cut section.

ENDOCRINE SYSTEM:

The pituitary, adrenal and thyroid glands are grossly normal.

GENITOURINARY TRACT:

Kidneys, weight right 230 grams, left 220 grams. The cortical surfaces of both kidneys are smooth, dark red,

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congested. Normal corticomedullary markings are noted on sagittal section. The calyces, pelves, ureters are normal. The urinary bladder contains 200 mL of clear yellow urine. The prostate and seminal vesicles are normal. The testes are normal to palpation. A normal circumcised penis is present.

GASTROINTESTINAL TRACT:

The esophageal mucosa is autolyzed. The gastric mucosa is autolyzed. The stomach contains 1130 grams of viscous, masticated, pale tan food material containing fragments of vegetable material and meat. The small and large bowel are grossly normal. The vermiform appendix is present and normal.

MUSCULOSKELETAL SYSTEM:

The musculoskeletal system normal. There is exogenous obesity and the abdominal panus is 4.5 cm in thickness.

URINE DRUG SCREEN:

Medtox Immunochromatographic plate  
THC: Negative.  
Opiates: Negative.  
Amphetamines: Negative.  
Cocaine: Negative.  
PCP: Negative.





NMS Labs  
3701 Welsh Road, PO Box 433A, Willow Grove, PA 19090-0437  
Phone: (215) 657-4900 Fax: (215) 657-2972  
e-mail: nms@nmslabs.com  
Robert A. Middleberg, PhD, DABFT, DABCC, Laboratory Director

CONFIDENTIAL

April 16, 2008

TO: 60C  
Santa Cruz County Coroner  
Attn: Alan Burt  
701 Ocean Street, #340  
Santa Cruz, CA 95060

TOXICOLOGY REPORT OF: McCORNACK, Daniel E. 45/M  
NMS Workorder No: 08095896  
NMS Control No: 10843208  
Client ID No: 08-027907  
08-027977

SPECIMENS: One gray top tube containing ~ 10 mL of peripheral blood, one clear vial containing ~ 14 mL of peripheral blood and two white plastic containers (one containing ~ 30 mL of urine and one containing ~ 32 g of liver) were received on 03/28/08.

EXAMINATION: Analysis Requested - Panel 8092B - Autopsy Toxicology Therapeutic and Abused Drug Screen

FINDINGS:

Blood

ETHYL ALCOHOL (by Enzymatic Assay & Headspace GC)	48 mg/dL (BAC=0.048 % w/v)
DILTIAZEM (by GC & GC/MS)	630 nanog/mL
QUINIDINE/QUININE* (by GC/MS)	Trace
ATROPINE (by GC/MS)	Positive

\*Quinine and quinidine can be differentiated analytically, but this is a separate analysis. If further delineation is necessary, please contact the laboratory.

Incidental findings by GC/MS: CAFFEINE and THEOBROMINE.

Other than the above findings, examination of the specimens submitted did not reveal any positive findings of toxicological significance by procedures outlined in the accompanying Analysis Summary.

COMMENTS:

1. Ethyl alcohol is a CNS-depressant and has effects so-related, e.g., impaired judgment, alertness and coordination.

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NMS Workorder No: 08095896  
NMS Control No: 10843208  
Client ID No: 08-02790  
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If the determined blood alcohol concentration (BAC) is representative of the circulating BAC at the time of the fatal incident, then it represents as absorbed body burden of approximately 2 "drinks" of an alcoholic beverage in an adult of average size weighing approximately 155 lbs.

Note: a "drink" =           1 oz. of distilled spirits  
                                  4 oz. of wine  
                                  12 oz. of beer

Each of the drinks listed above contains about the same amount of ethyl alcohol.

2. Diltiazem (Cardizem®) is a calcium channel blocking coronary vasodilator indicated for the treatment of variant, exertional and unstable angina. It is also used in arrhythmic and/or hypertensive therapy. Desacetyldiltiazem is an active metabolite of diltiazem. Divided doses up to 180-360 mg daily may be prescribed for angina.

Therapeutic blood levels of diltiazem appear to be in the range of 50 to 200 nanog/mL. Numerous cases of diltiazem overdose have been reported. The majority of individuals who receive prompt treatment survive diltiazem overdose; however, death has been reported, especially in conjunction with other substances. Diltiazem has been found mixed with cocaine, either as a cutting agent or in an attempt to reduce cocaine-induced increased blood pressure. In a separate, small series of diltiazem related fatalities, the postmortem blood concentrations range from 6700 to 33,000 nanog/mL (mean 16,000 nanog/mL). In addition, diltiazem is reported to undergo postmortem redistribution with an average heart blood/femoral blood ratio of 2.6.

3. Quinine and quinidine are stereoisomers derived from the bark of the cinchona tree. Quinine has been used in the past as an antimalarial, but is more commonly used today to treat muscle cramps. It is also used as a flavoring agent in tonic waters and as a cutting agent adulterant in illicit street drug dosages of heroin. Adverse effects include gastrointestinal disturbances, tinnitus, dizziness, arrhythmias and hypotension.

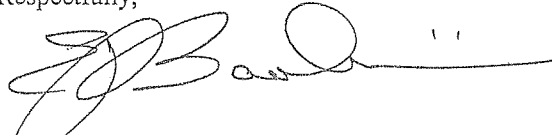
Quinidine is frequently used as an antiarrhythmic agent. It is available for acute administration by intramuscular or intravenous injection of 200 to 750 mcg or for maintenance therapy in oral doses of 600 to 4,000 mg daily. Toxicity is manifested by gastrointestinal disturbances, giddiness, tinnitus, diplopia and hypotension.

4. Atropine is an anticholinergic alkaloid used in pre-anesthetic therapy to control airway secretions and as an antispasmodic to control gastrointestinal spasms. It is frequently used as an antidote in the treatment of anticholinesterase-type pesticides. It can be obtained naturally from deadly nightshade or jimson weed. Atropine is also used in resuscitative attempts.

Toxic effects of atropine have considerable individual variation; however, at high doses, signs and symptoms include mydriasis, hot dry reddened skin, deliriums and hallucinations.

In resuscitative failure, most of the administered drug remains confined to the intravascular injection pathway.

Respectfully,



Edward J. Barbieri, Ph.D.  
Forensic Toxicologist

EJB/lmm

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NMS Workorder No: 08095896  
NMS Control No: 10843208  
Client ID No: 08-02790  
Page 3 of 3

This analysis was performed under chain of custody. The chain of custody documentation is on file at NMS Labs.

Unless alternate arrangements are made by you, the remainder of the submitted specimens will be discarded six (6) weeks from the date of this report; and generated data will be discarded five (5) years from the date of this report.

\*\*\*\* \* ANALYSIS SUMMARY \* \*\*\*\*

8092B - Therapeutic and Abused Drug Screen

Test No. 8092B – Drug Screen by Enzyme-Linked Immunosorbent Assay (ELISA) on Blood for: Amphetamine, Barbiturates, Benzodiazepines, Cannabinoids (Marihuana), Cocaine/Metabolites, Methamphetamine, Opiates and Phencyclidine (PCP); Headspace Gas Chromatography for Ethanol, Methanol, Acetone and Isopropyl Alcohol.

Test No. 8092B - Drug Screen II- Gas Chromatography and Gas Chromatography/Mass Spectrometry Analysis on Blood:

The following is a general list of compound classes included in the Gas Chromatographic screen. Other specific compounds outside these classes are also included. Please note that not all known compounds included in each specified class or heading are included. The detection of any particular compound is concentration-dependent. For a detailed list of all compounds included in this screen, please contact NMS Labs.

Analgesics (opioid and non-opioid), Anesthetics, Antiasthmatic Agents, Anticholinergic Agents, Anticonvulsant Agents, Antidepressants, Antiemetic Agents, Antihistamines, Antiparkinsonian Agents, Antipsychotic Agents, Antitussive Agents, Anxiolytics (Benzodiazepine and others), Cardiovascular Agents (non-digitalis), Hallucinogens, Hypnosedatives (Barbiturate and others), Muscle Relaxants, Non-Steroidal Anti-Inflammatory Agents (excluding Salicylate) and Stimulants (Amphetamine-like and others).

Test No. 8092B - Colorimetric Analysis on Blood for: Salicylates and Acetaminophen.

Test No. 5010B - Alcohol Confirmation - Enzymatic Assay on Blood for: Ethanol (Ethyl alcohol).

Test No. 1640B - Diltiazem - Gas Chromatography on Blood for: Diltiazem.

\* \* \* \* \* END OF REPORT \* \* \* \* \*



**NMS Labs**  
 3701 Welsh Road, PO Box 433A, Willow Grove, PA 19090-0437  
 Phone: (215) 657-4900 Fax: (215) 657-2972  
 e-mail: nms@nmslabs.com  
 Robert A. Middleberg, PhD, DABFT, DABCC, Laboratory Director

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June 24, 2008

**TO:** 60C  
 Santa Cruz County Coroner  
 Attn: Alan Burt  
 701 Ocean Street, #340  
 Santa Cruz, CA 95060

**SUPPLEMENTAL TOXICOLOGY REPORT OF:**

NMS Workorder No:  
 NMS Control No:  
 Client ID No:

**McCORNACK, Daniel E.**  
 08095896  
 10843208  
 08-02797

45/M

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**EXAMINATION:** Analysis Requested - Panel 8092B - Autopsy Toxicology Therapeutic and Abused Drug Screen  
 Test No. 1615B - Digoxin

**FINDINGS:****Blood**

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DILTIAZEM (by GC & GC/MS)	630 nanog/mL
DIGOXIN (by LC-MS/MS)	3.6 nanog/mL
QUINIDINE/QUININE* (by GC/MS)	Trace
ATROPINE (by GC/MS)	Positive

\*Quinine and quinidine can be differentiated analytically, but this is a separate analysis. If further delineation is necessary, please contact the laboratory.

**Incidental findings by GC/MS: CAFFEINE and THEOBROMINE.**

Other than the above findings, examination of the specimens submitted did not reveal any positive findings of toxicological significance by procedures outlined in the accompanying Analysis Summary.

PLAINTIFFS' EXHIBITS 010292

*Handwritten signature and date:*  
 6.27.0

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NMS Workorder No: 08095896  
NMS Control No: 10843208  
Client ID No: 08-02790  
Page 2 of 3

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3. Digoxin (Lanoxin®) is a cardiac glycoside used in the treatment of congestive heart failure and other contractility-related deficiencies. There is considerable individualization of the dose of this medication and what is therapeutic in one individual may be toxic in another.

Individuals are generally titrated to find an appropriate dosage, especially since digoxin has a low therapeutic index.

4. Quinine and quinidine are stereoisomers derived from the bark of the cinchona tree. Quinine has been used in the past as an antimalarial, but is more commonly used today to treat muscle cramps. It is also used as a flavoring agent in tonic waters and as a cutting agent adulterant in illicit street drug dosages of heroin. Adverse effects include gastrointestinal disturbances, tinnitus, dizziness, arrhythmias and hypotension.

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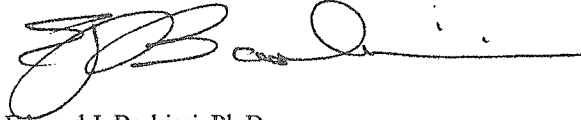
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NMS Workorder No: 08095896  
NMS Control No: 10843208  
Client ID No: 08-02790  
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Respectfully,



Edward J. Barbieri, Ph.D.  
Forensic Toxicologist

EJB/lfb

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Test No. 8092B - Colorimetric Analysis on Blood for: Salicylates and Acetaminophen.

Test No. 5010B - Alcohol Confirmation - Enzymatic Assay on Blood for: Ethanol (Ethyl alcohol).

Test No. 1640B - Diltiazem - Gas Chromatography on Blood for: Diltiazem.

Test No. 1615B - Digoxin - Liquid Chromatography - Tandem Mass Spectrometry on Blood for: Digoxin.

\*\*\*\*\* END OF REPORT \*\*\*\*\*